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THE TAXONOMIC HISTORY OF THE SOUTH AND CENTRAL AMERICAN CRICETID RODENTS OF THE GENUS *ORYZOMYS*.—PART 2: SUBGENERA *OLIGORYZOMYS, THALLOMYSCUS, AND MELANOMYS*

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The present paper, Part 2 of the fourth of my papers on the Cricetidæ, is a direct continuation of and should be considered in conjunction with Part 1 (on the subgenus *Oryzomys*).

HISTORICAL STATEMENT[1]

ORYZOMYS Baird

Subgenus OLIGORYZOMYS Bangs

1801. Azara described (p. 98) RAT SIXIÈME OU RAT A TARSE NOIR, probably an *Oligoryzomys*.

1802. Azara described further (p. 91) the above species under the name COLILARGO.

1819. Desmarest applied (p. 64) the name *Mus nigripes* (n. sp.) to Azara's RAT A TARSE NOIR.

1830. Rengger described (p. 232) *Mus longitarsus* (n. sp.) (apparently an *Oligoryzomys*).

1832. Bennett described (p. 2) *Mus longicaudatus* (n. sp.).

1835. Bennett described (p. 191) *Mus magellanicus* (n. sp.). The dimensions given by Bennett seem too large for *Oligoryzomys*, but Thomas (1927*a*) treated it as such.

1837. Waterhouse described (p. 19) *Mus flavescens*. He placed it in none of his four subgenera of *Mus* (*Calomys*, *Phyllotis*, etc.).

1839. Waterhouse remarked further (p. 46) upon *flavescens* and added descriptions of *longicaudatus* and *magellanicus*. They were placed in the blanket genus *Hesperomys* (p. 74).

1841. Lund described (p. 279) "*Mus longicaudatus*," preoccupied by *longicaudatus* Bennett. His description however agrees well with *Oligoryzomys*.

[1] A copy of the newly published 'A Manual of Neotropical Sigmodont Rodents,' by Nils Gyldenstolpe (Kungl. Svenska Vetenskapsakad. Handlingar, (3) XI, No. 3, pp. 1–164 and plates, 1932), has just been received. This work should be consulted for each cricetid genus. It reached my hands too late to receive treatment under the generic headings.

1843. Wagner placed (p. 529) *longicaudatus* and (p. 530) *flavescens* in *Hesperomys* (*Calomys*).

1843. Bridges wrote (p. 129) of *longicaudatus* in the Quillota Valley, Chile.

1845. Tschudi described (p. 182) *Hesperomys destructor* (n. sp.) and *H. melanostoma* (n. sp.). Both have the general appearance of *Oligoryzomys*, the former having the tail shorter, the latter longer than the body. Both were placed by Tschudi in *Hesperomys* (*Hesperomys*).

1845. Wagner described (p. 147) *Hesperomys eliurus* (n. sp.) and *pygmæus* (n. sp.).

1848. Peale described (p. 51) *Mus peruvianus*, n. sp.

1850. Wagner thought (p. 309) *eliurus* near *longicaudatus* Bennett and identical with *longicaudatus* Lund. He further described *pygmæus*.

1854. Burmeister re-characterized (p. 173) *eliurus* under *Hesperomys* (*Calomys*).

1855. Burmeister (1854) briefly discussed (p. 7) *longicaudatus*, *eliurus*, and *flavescens*.

1858. Philippi and Landbeck described (p. 80) *Mus philippii* (n. sp.), determined by Wolffsohn (1910) to be a synonym of *longicaudatus* Bennett.

1858. Cassin placed *peruvianus* Peale in the synonymy of *Drymomys parvulus* (=*Mus musculus?*).

1859. Baird erected *Oryzomys*, subgenus of *Hesperomys*.

1860*a*. Tomes described (p. 215) *Hesperomys minutus*, n. sp.

1860. De Saussure described (pp. 102–108) *Hesperomys fulvescens* (n. sp.).

1872. Hensel gave (p. 37) additional information about *flavescens*.

1881. Thomas described (p. 4) *Hesperomys* (*Calomys*) *coppingeri*, n. sp.

1882. Thomas received (p. 104) "*longicaudatus*" from Peru (later renamed *stolzmanni*).

1883. Pelzeln wrote concerning *eliurus* and *pygmæus*.

1884. Thomas removed most of the South American *Oryzomys* from *Calomys* and placed them in *Oryzomys* (including *Oligoryzomys*) as now understood.

1886. Leche wrote of (p. 694) *flavescens*.

1887. Winge wrote in detail (p. 46) upon "*Calomys longicaudatus*."

1890. Coues raised (p. 4164) *Oryzomys* to full generic rank.

1891. Thomas in Milne-Edwards made additional remarks (p. 26) upon *coppingeri* and (p. 27) "*longicaudatus*."

1893. Goeldi wrote of *eliurus, pygmæus,* and *flavescens* under *Hesperomys.*

1893. Ihering placed *flavescens* under subgenus *Calomys.*

1893. J. A. Allen described (p. 239) *Oryzomys costaricensis,* n. sp.

1894. Ihering gave (p. 19) only "*longicaudatus*" of the genus *Oryzomys* under *Hesperomys* (*Calomys*), and synonymized *flavescens, pygmæus,* and *eliurus* with it.

1894. Thomas described (p. 357) *Oryzomys stolzmanni,* n. sp. (see Thomas, 1882). He compared *stolzmanni* with *longicaudatus* and "*minutus.*" (This last was re-described as *dryas* in 1898.)

1894. Figuera remarked upon "*Hesperomys*" *flavescens.*

1897. Allen and Chapman described (p. 19) *Oryzomys delicatus,* n. sp.

1897*d*. J. A. Allen listed (p. 204) *fulvescens* in *Oryzomys,* commenting on its near relationship to *costaricensis.*

1898*a*. Thomas described (p. 178) *Oryzomys victus,* n. sp.

1898*c*. Thomas described (p. 267) *Oryzomys dryas,* n. sp. (now in *Thallomyscus*), based upon a skin from Pallatanga, Ecuador, which was referred by him in 1884 to *minutus.*

1898. Trouessart listed all *Oligoryzomys* under *Oryzomys.*

1899. Bangs described (p. 9) *Oryzomys navus,* n. sp.

1900. Philippi described about seventy forms of mice under the genus *Mus,* the following six of which were synonymized by Wolffsohn (1910) with *longicaudatus: philippii, macrocercus, nigribarbis, saltator, amblyrrhynchus, diminutivus.*

1900. Bangs erected (p. 94) *Oligoryzomys,* n. subg. of *Oryzomys,* to contain the small species usually called "pygmy oryzomys," with type *Oryzomys navus* Bangs. He included *dryas humilior* Thomas (a *Thallomyscus*).

1901*a*. Thomas described (p. 151) *Oryzomys navus messorius,* n. subsp. (see Allen, 1911).

1901*b*. Merriam fixed (p. 295) the type locality of *fulvescens.*

1902. Thomas stated (p. 60) that *pygmæus* was a juvenile specimen of *eliurus.*

1902. Bangs listed (p. 35) *costaricensis* and *vegetus,* n. sp., under *Oryzomys* (*Oligoryzomys*).

1904*a*. J. A. Allen described (p. 328) *Oryzomys tenuipes,* n. sp.

1905. J. A. Allen re-described (p. 46) *longicaudatus* Bennett, remarking that "*longicaudatus*" Thomas in Milne-Edwards (1890) was probably *magellanicus.*

1905. Trouessart listed in *Oligoryzomys,* subgenus, (p. 442): *navus*

navus messorius, fulvescens, costaricensis, minutus, minutus humilior, dryas, and *vegetus.*

1909. Lyon and Osgood stated (p. 289) that the type of *peruvianus* was lost.

1910. J. A. Allen described (p. 100) *Oryzomys* (*Oligoryzomys*) *nicaraguæ,* n. sp.

1910. Wolffsohn synonymized six of Philippi's (1900) names with *longicaudatus* Bennett.

1911. J. A. Allen stated (p. 253) that *delicatus* was an *Oligoryzomys* and raised (p. 254) *navus messorius* Thomas (1901) to full specific rank.

1912. Osgood described (p. 49) *Oryzomys griseolus,* n. sp.

1912. J. A. Allen described (p. 85) *Oryzomys* (*Oligoryzomys*) *munchiquensis,* n. sp., and (p. 86) *Oryzomys* (*Oligoryzomys*) *fulvirostris,* n. sp.

1913*b*. Thomas described (p. 571) *Oryzomys arenalis,* n. sp.

1914. Stone traced (p. 10) the history of *Oryzomys minutus* (Tomes).

1914*b*. Osgood described (p. 155) *Oryzomys stolzmanni maranonicus,* n. subsp., and *Oryzomys andinus,* n. sp. He remarked (p. 154) upon *stolzmanni,* (p. 156) *arenalis* and *peruvianus* (Peale), and (p. 158) *minutus* and *dryas* (both *Thallomyscus.* See Thomas, 1926).

1915. Goldman described (p. 130) *Oryzomys fulvescens lenis,* n. subsp.

1916. Osgood described (p. 205) *Oryzomys chaparensis,* n. sp., comparing it with *eliurus.*

1916. Thomas corrected the location of the type locality of *coppingeri* and mentioned the close affinity of *coppingeri* to *magellanicus.* He described (p. 186) *Oryzomys magellanicus mizurus,* n. sp.

1916*b*. J. A. Allen described (p. 525) *Oryzomys* (*Oligoryzomys*) *microtis,* n. sp., (p. 527) *Oryzomys* (*Oligoryzomys*) *utiaritensis,* n. sp., and *Oryzomys* (*Oligoryzomys*) *mattogrossæ,* n. sp.

He remarked (pp. 526–527) upon the naturalness of the *Oligoryzomys* group, concluding that it ought to remain a subgenus.

1917*a*. Thomas erected (p. 1) *Microryzomys,* n. subg., with type *Oryzomys minutus* Tomes.

1917*b*. Thomas described (p. 96) *Oryzomys delticola,* n. sp.

1918. Goldman listed (p. 17) *costaricensis* as a subspecies of *fulvescens* in Central America and described (p. 92) *fulvescens mayensis,* n. subsp. He made *nicaraguae* a synonym of *costaricensis.*

1920. Thomas remarked (p. 229) upon *Microryzomys* and stated that the type of *minutus* "shows the characters of *Microryzomys* in all respects."

1924. Miller, following Goldman (1918), listed (p. 362) *Oligoryzomys* as a subgenus of *Oryzomys*.

1926. Thomas remarked (pp. 611–612) "there seems no tangible difference between *stolzmanni* of Peru and *minutus* of Ecuador." He thought that *peruvianus* Peale, "afterwards stated by Peale himself to be synonymous with *Drymomys parvulus* Tschudi, which is certainly *Mus musculus*," should be taken as the common house mouse, and the name *arenalis* should be left valid for the Pacasmayo *Oryzomys*.

He reversed his conclusions (1920) regarding *minutus* Tomes and now declared it not a *Microryzomys*, but an *Oryzomys*, "no doubt of the *Oligoryzomys* group." But *minutus* was type of *Microryzomys*, so *Microryzomys* now became a synonym of *Oligoryzomys*.

He next proposed the [subgeneric ?] name *Thallomyscus* with type *Oryzomys dryas* Thomas; and stated that *minutus* of Tomes (an *Oligoryzomys*) was distinct from *minutus* of Osgood, 1914 (a *Thallomyscus*). He placed (p. 612) *aurillus* in *Thallomyscus*.

1927*a*. Thomas thought (p. 369) that *destructor* Tschudi should be considered a subspecies of *longicaudatus* Bennett. He believed *melanostoma* Tschudi and "the Peruvian mouse commonly called *minutus* or *stolzmanni*" to be synonymous with *longicaudatus destructor*.

1927*b*. Thomas, in his choice of lectotypes in the British Museum (pp. 548–549), selected: male, 79.8.21.15 from Cockle Cove, Patagonia, for the lectotype of *coppingeri;* and 55.12.24.174 from Port Famine, Magellan, for lectotype of *magellanicus*, with 55.12.24.337 lectoparatype.

1929. Thomas suggested (p. 38) that all the southern forms—*magellanicus, mizurus, coppingeri*—might well be subspecies of *longicaudatus*.

Subgenus **THALLOMYSCUS** Thomas

1894. Thomas identified (p. 357) as *minutus* (Tomes) a mouse which in 1898 he re-named *dryas*.

1898*c*. Thomas described (p. 267) *Oryzomys dryas*, n. sp., based upon the

specimen from Pallatanga referred by him in 1894 to *minutus*. He described (p. 268) *Oryzomys dryas humilior*, n. subsp.

1914*b*. Osgood discussed (p. 158) "*dryas*" (a *Thallomyscus*, according to Thomas, 1926).

1917*a*. Thomas described (p. 1) *Oryzomys* (*Microryzomys*)[1] *aurillus*, n. sp.

1926. Thomas erected (p. 613) *Thallomyscus*, n. subg. of *Oryzomys* with type *Oryzomys dryas* Thomas, and included in it *aurillus*.

1927*c*. Thomas further discussed (p. 600) *Thallomyscus aurillus*.

Subgenus **Melanomys** Thomas

1860*b*. Tomes described (p. 263) *Hesperomys caliginosus*, n. sp.

1882. Thomas discussed (p. 110) under "*caliginosus*" a rat which he referred rather doubtfully to Tomes's animal. (Probably *Akodon* (*Chalcomys*) *ærosus*).

1891*a*. J. A. Allen commented upon (p. 210) "*Hesperomys* (*Habrothrix*) *caliginosus* Tomes?" from Central America (=*chrysomelas*).

1893. Allen and Chapman referred (p. 217) a diurnal mouse of Trinidad provisionally to "*Abrothrix caliginosus*." This was an *Akodon* (*Chalcomys*).

1894. Thomas described (p. 355) *Oryzomys phæopus*, n. sp., and (p. 356) *Oryzomys phæopus obscurior*, n. subsp.

1897*a*. J. A. Allen described (p. 37) *Oryzomys chrysomelas*, n. sp. He stated that Costa Rican skins previously referred by him to *Hesperomys caliginosus* Tomes were really *Oryzomys chrysomelas* and he compared *chrysomelas* briefly with *alfaroi* (an *Oryzomys*).

1897. Allen and Chapman corrected their identification of "*Abrothrix caliginosus*" (1893) to *Akodon urichi*, n. sp.

1898. Trouessart listed (p. 523) the species of *Melanomys* under *Oryzomys*.

1899. J. A. Allen described (p. 203) *Akodon columbianus*, n. sp.

1900. Bangs removed (p. 95) *phæopus obscurior* to "*Oryzomys* (*Zygodontomys*)." He suggested that *O. sanctæmartæ* Allen (a true *Oryzomys*) was closely allied to it.

1902*c*. Thomas erected (p. 247) *Melanomys*, n. subg. of *Oryzomys*, with type *Oryzomys phæopus* Thomas.

1903. Thomas again advised (pp. 40–41) separation of *Melanomys* from *Oryzomys*.

[1]For history of *Microryzomys* see under *Oligoryzomys* (1917, 1920, and 1926).

1904*b*. J. A. Allen removed (p. 437) *columbianus* from *Akodon* (1899) to *Oryzomys* (*Melanomys*) and stated (p. 440) that the "*phæopus obscurior*" of Bangs equalled *columbianus* Allen.

1905. Trouessart listed (p. 422) *Melanomys* as a subgenus of *Oryzomys*. *Phæopus* with its subspecies and *chrysomelas* were the only two species given. *Caliginosus* appeared under *Akodon*.

1911. J. A. Allen listed (p. 254) *venezuelensis* Allen (an *Akodon*) under "*Oryzomys* (*Melanomys*)."

1912. Goldman described (p. 5) *Oryzomys idoneus*, n. sp.

1912. J. A. Allen listed (p. 87) *phæopus* and *obscurior* as full species and suggested that *chrysomelas* might be a subspecies of *obscurior* only slightly differentiated. He described (p. 88) *Oryzomys* (*Melanomys*) *obscurior affinis*, n. subsp.

1913*a*. Thomas remarked (p. 406) that some of the animals referred earlier by Allen and himself to *caliginosus* were *Akodon ærosus*.

1913*a*. J. A. Allen stated (p. 480) that certain species before referred to *phæopus* and *obscurior* were in reality *Akodon tolimæ*.

1913*b*. J. A. Allen revised (pp. 533–555) the *Melanomys* group, treating it as a full genus.

Obscurior and *affinis* were made full species (pp. 535, 539, 546) and the following new forms were proposed: (p. 538) *caliginosus oroensis*, n. subsp.; (p. 540) *affinis monticola*, n. subsp.; (p. 544) *phæopus vallicola*, n. subsp.; (p. 545) *phæopus tolimensis*, n. subsp.; (p. 545) *lomitensis*, n. sp.; (p. 547) *buenavistæ*, n. sp.

1914. Thomas described (p. 243) *Melanomys robustulus*, n. sp.

1918. Goldman characterized (p. 94) *Melanomys*, reducing it to a subgenus once more, and made *idoneus* and *chrysomelas* subspecies of *caliginosus*.

1924. Miller, following Goldman (1918), listed (p. 363) *Melanomys* as a subgenus of *Oryzomys*.

PRESENT STATUS OF *ORYZOMYS* AND ITS SUBGENERA

Genus *Oryzomys* Baird	Type by original designation: *Mus palustris* Harlan
Subgenus *Oryzomys* Baird	
Subgenus *Oligoryzomys* Bangs (=*Microryzomys* Thomas)	Type by original designation: *Oryzomys navus* Bangs
Subgenus *Thallomyscus* Thomas	Type by original designation: *Oryzomys dryas* Thomas
Subgenus *Melanomys* Thomas	Type by original designation: *Oryzomys phæopus* Thomas

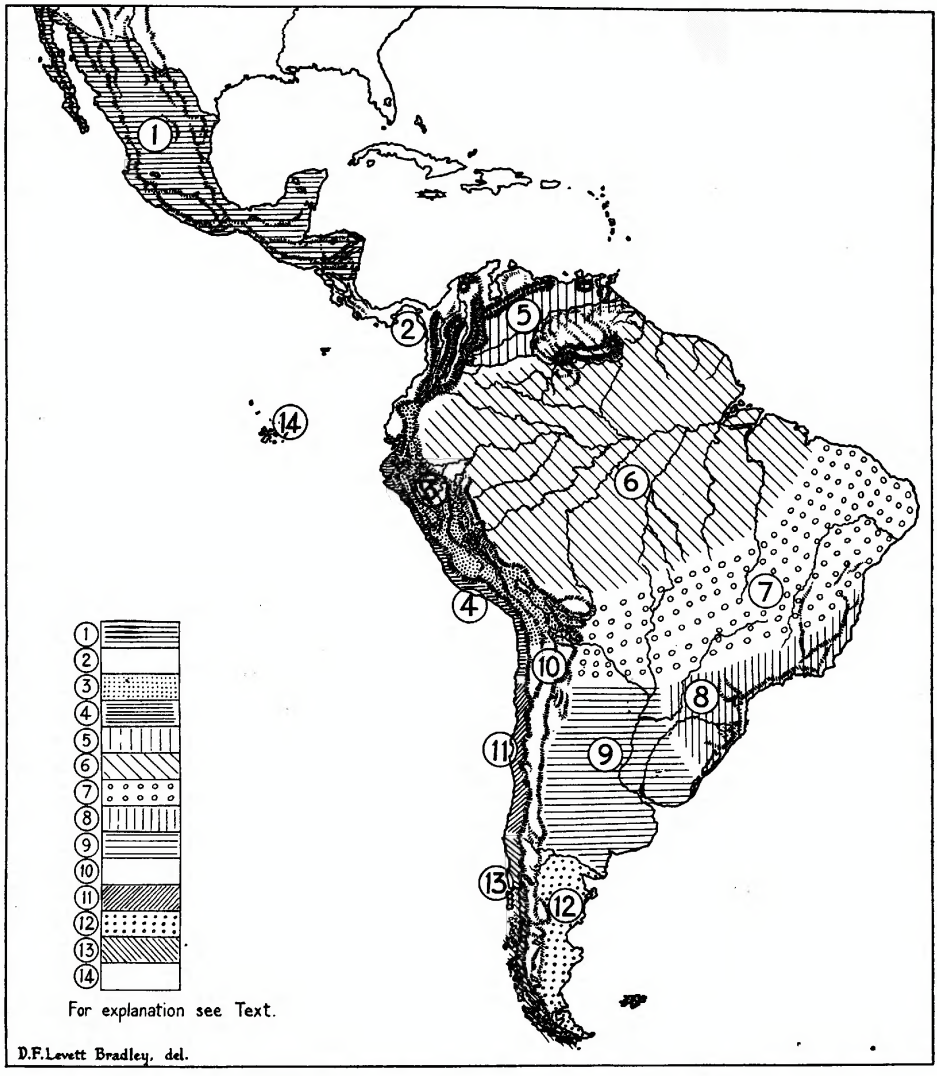

Fig. 1 Map to show phytogeographical areas of Central and South America. For full descriptions see original in American Museum Novitates, No. 579 (Part 1 of this paper).

List of Named Forms with Type Localities

As stated in Part 1 of this paper, the larger subgenera have been classed under generalized phytogeographical provinces. For convenience, the map to show these areas is reprinted herewith. For definitions of phytogeographical provinces see pp. 12–14, Part 1.

Oryzomys (*Oligoryzomys*)

Since it is as yet quite uncertain whether *Oligoryzomys* represents a natural division or is merely a polyphyletic assemblage of small forms descended from independent oryzomine stocks, I have grouped together for convenience only the names of those mice which from their small size appear to belong to *Oligoryzomys*. Concerning the validity of locating in *Oligoryzomys* the species listed for Central America and northwestern South America there can be little doubt. Thomas has intimated (1927*a* and 1929) that the Chilean and Patagonian forms should be included in the subgenus. But no statement has yet been published as to the standing in this respect of the small-sized *Oryzomys* of Paraguay, Uruguay and southern Brazil. My inclusion of the last-named mice in *Oligoryzomys;* then, is purely by way of suggestion.

Region 1 (Central America)

fulvescens fulvescens (Saussure)	Mexico (Orizaba, Vera Cruz. See Merriam, 1901)
fulvescens lenis Goldman	Los Reyes, Michoacan, Mexico
fulvescens costaricensis Allen	El General, Costa Rica, 2150 ft.
fulvescens mayensis Goldman	Apazote, Campeche, Mexico
nicaraguæ Allen[1]	Vijagua, east of Matagalpa, Nicaragua

Region 2 (north and west of the Andes, and Panama)

minutus (Tomes)	"believed . . . at Pallatanga, but the exact locality is not certain," Ecuador
fulvescens vegetus Bangs	Boquete, Chiriqui, Panama
tenuipes Allen	Mérida, Venezuela, 1630 m.

Region 3 (Andes above 6000 ft.)

destructor (Tschudi)	"The house mouse of the 'Plantagen at the border of the forest," eastern Peru
melanostoma (Tschudi)	"A field mouse . . . found in yuca and corn fields," eastern Peru
andinus Osgood	Hacienda Llagueda, upper R. Chicama, Peru; 6000 ft.

[1]Synonymized by Goldman with *fulvescens costaricensis* Allen.

navus Bangs	Pueblo Viéjo, Sierra Nevada de Santa Marta, Colombia, 8000 ft.
griseolus Osgood	Paramo de Tama, head of R. Tachira, Venezuela, 6000–7000 ft.
munchiquensis Allen	La Florida, Colombia, 7700 ft.
fulvirostris Allen	Munchique, Colombia, 8325 ft.
Region 4 (Pacific coastal strip)	
peruvianus (Peale)[1]	Callao, Peru
arenalis Thomas	Eten, coast of northwestern Peru
Region 5 (central Venezuela to Trinidad)	
delicatus Allen and Chapman	Caparo, Trinidad
victus Thomas	St. Vincent
Region 6 (Amazonia)	
stolzmanni stolzmanni Thomas	Huambo, northern Peru, 3700 ft.
stolzmanni maranonicus Osgood	Hacienda Limon, near Balsas, R. Marañon, Peru
microtis Allen	Lower R. Solimoes (50 miles above mouth) Brazil
messorius Thomas	Kanuku Mts., British Guiana
Region 7 (Ceará to Matto Grosso)	
longitarsus (Rengger)	North of Villa Real, on the banks of the Paraguay River
utiaritensis Allen	Utiarity, R. Papagaia, Matto Grosso, Brazil
mattogrossæ Allen	Utiarity, Matto Grosso, Brazil
chaparensis Osgood	Todos Santos, Chaparé R., Bolivia
Region 8 (south Brazil)	
nigripes (Desmarest)	Atira, 50 leagues from San Ignace Gouazou, Paraguay
eliurus (Wagner)	"Woods of São Paulo and Matto Grosso," Brazil
pygmæus (Wagner)	Ypanema, São Paulo, Brazil
Region 9 (Pampas)	
flavescens (Waterhouse)	Maldonado, Uruguay
delticola Thomas	Isla Ella, delta R. Parana
Region 11 (Central Provinces of Chile)	
longicaudatus (Bennett)	"In trees in Chile"
philippii (Philippi and Landbeck)[2]	In woods and fields, Chile
Region 12 (arid Patagonia)	
magellanicus magellanicus (Bennett)	Near Port Famine, Magellan
magellanicus mizurus Thomas	Koslowsky Valley, 46° S., 71° W., central Patagonia

[1] *Peruvianus* may have been *Mus musculus*.
[2] Synonym of *longicaudatus;* for other synonyms of *longicaudatus* see Philippi, 1900.

Region 13 (Patagonian rain forests)

coppingeri (Thomas)	An island in Cockle Cove, Tom Bay, Magellan. (Corrected 1916 to: Tom Bay, in the Trinidad Channel, northern end of Madre de Dios Island, western Patagonia, in 50° S. latitude)

Oryzomys (*Thallomyscus*)

This apparently represents a purely local offshoot of *Oryzomys* confined to the Andean area of Peru, Ecuador, and Colombia, which possesses the general facies of *Oligoryzomys* but is to be distinguished by characters pointed out by Thomas. *Thallomyscus* and *Oligoryzomys* seem to occur together and occupy the same habitats.

dryas dryas Thomas	Pallatanga, Ecuador
dryas humilior Thomas	Plains of Bogotá, Colombia
aurillus Thomas	Torontoy, near Cuzco, Peru

Oryzomys (*Melanomys*)

Considering the relatively large number of forms of *Melanomys*, and the restriction of most of them to the relatively small region (No. 2) north and west of the Andes, it seems not improbable that further reduction in their ranks is required.

Region 1 (Central America)

caliginosus chrysomelas Allen	Suerre, Central Costa Rica, 3000–5000 ft.

Region 2 (north and west of the Andes, and Panama)

caliginosus caliginosus (Tomes)	Western Ecuador
caliginosus idoneus Goldman	Cerro Azul, near headwaters of Chagres R., Panama, 2500 ft.
caliginosus oroensis (Allen)	Rio de Oro, Manavi, Ecuador, 1500 ft.
phæopus phæopus Thomas	Pallatanga, Ecuador
phæopus obscurior Thomas	Concordia, Medellin, Colombia
phæopus vallicola (Allen)	Rio Frio, Cauca Valley, Colombia, 3500 ft.
phæopus tolimensis (Allen)	R. Toché, Tolima, Colombia, 6800 ft.
columbianus (Allen)	Manzanares, Santa Marta district, Colombia
affinis affinis Allen	San José, Cauca, Colombia, 200 ft.
affinis monticola (Allen)	Galera, west slope of western Andes, Colombia, 5700 ft.
lomitensis (Allen)	Las Lomitas, western Andes, Colombia, 5000 ft.

Region 5 (central Venezuela to Trinidad)

buenavistæ (Allen)	Buenavista, 50 miles southeast of Bogotá, Colombia
robustulus Thomas	Gualaquiza, eastern Ecuador, 2500 ft.

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